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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,203	01/30/2004	Kevin W. Rudd	200207941-1	7538

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EXAMINER	
COLEMAN, ERIC	
ART UNIT	**PAPER NUMBER**
2183	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/769,203	RUDD ET AL.	
	Examiner	Art Unit	
	Eric Coleman	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-32 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5,7,10-14,16,18-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Blandy (patent No.6, 983, 361).

3. Blandy taught the invention as claimed including a data processing ("DP") system comprising (As per claims 1,10,18,23,28):

a) Feature indicator associated with at least one of a first sequence of one or more instructions(e.g., see fig. 3);

b) First register (e.g., see col. 1, lines 60-65);

c) Second register (e.g., see col. 1, lines 60-65); and

d) Execution core (202, 204)(e.g., see fig. 2a);

e) Wherein the execution core is configured to execute a first instruction to cause the first register to be set to a first value using the feature indicator and to cause the second register to be set to a second value using the feature indicator (e.g., see col. 6, lines 5, line 58-col. 6, line 53) wherein the execution core is configured to execute the first sequence of one or more instructions to cause a function to be performed in

response to the first value in the first register indicating a true condition, and wherein the execution core is configured to execute a second sequence of one or more instructions to cause the function to be performed in response to the second value in the second register indicating the true condition (e.g., see col. 5, lines 18-38).

4. As per claim 23, the insertion of the instructions discussed above, this feature is anticipated because in order to implement the program for performing the operations the instructions discussed above would have to have been inserted into the sequence of instruction being executed.

5. As per claim 2,11,12,20,26,27,29,30 Blandy taught the execution core is configured to execute the first sequence of instructions as no-operations in respond the first value in the first register indicating a false condition, and wherein the execution core is configured to execute the second sequence of instructions as NOPs in response to the second value in the second register indicating a false condition (e.g., see col. 5, lines 18-38).

6. As per claim 3, Blandy taught the first instruction comprises a predicate producing instruction (e.g. see, col. 5, lines 8-38).

7. As per claims 4,7,13,14,16,19,21,22,24,24,25 Blandy taught the first instruction comprises a feature specifier associated with at least one sequence of instructions (e.g., see col. 6, lines 22-37) and the feature indicator is stored in a features register indicating whether the processor supports the one or more first sequence of instructions

for selectively setting registers(the mask data used as part of an instruction and therefore is anticipated to be stored in a register)(e.g., see col. 6 lines 22-37).

8. As per claim 5, Blandy disclosed the first register comprises a first predicate register and wherein the second register comprises a second predicate register (e.g., see col. 5, lines 8-38).

9. As per claims 31,32 Blaner taught the execution of a branch instruction to be taken or not is dependent of the value of the predicate register (e.g., see fig. 3 and col.6, lines 1-63).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 6,15,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blaner as applied to claims 1-5,7,10-14,16 above, and further in view of Christie (patent No. 6,009,512).

12. As per claims 6,15,17 Christie taught storing and using the predicated values as complement values as well as uncomplemented values. (e.g. see col. 13, lines 1-24).

13. It would have been obvious to one of ordinary skill in the DP art to combine the the teachings of Blaner and Christie. Both references were directed to the problems for using predicates in processing instructions. One of ordinary skill would have been motivated to incorporate the Christie teachings of use and storing the actual and

complemented values of the predicate values at least to improve the processing of instructions using predicates.

14. Claims 8,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blaner as applied to claims 1-5,7 above, and further in view of Johnson (patent No. 6,918,030).

15. Johnson taught an Itanium processor implementing the IA-64 architecture and the "NaT "instruction e.g., see col. 6, lines 15-54 and col. 7, lines 14-38 and col. 8, line 49-col. 9, line 17).

16. Both the Blaner and Johnson references were directed implementing data processing using the IA-64 architecture (e.g., see col. 2, lines 32-39 of Blaner). The addition of the Johnson teachings of implementing the IA-64 using the Itanium processor would have allowed the combined system to take advantage of the speed of processing of the Itanium processor and an improved manner of processing an instruction in the IA-64 architecture namely the NaT instruction (e.g. see col. 1, line 64-col. 3, line 65 of Johnson).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilson (patent No. 6,986,025) disclosed a DP system with condition execution per lane (e.g., see abstract).

Chen (patent No. 6,631,465) disclosed a system for instruction realignment using a branch on a falsehood of a qualifying predicate (e.g., see abstract).

Schlansker (patent No. 6,023,751) disclosed a computer system for evaluating predicates and Boolean expressions (e.g., see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Coleman whose telephone number is (571) 272-4163. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EC

ERIC COLEMAN
PRIMARY EXAMINER